BRUHAT BANGALORE MAHANAGARA PALIKE

YALAHANKA ZONE

Name of Work:-Detailed Estimate for Providing Energy efficient LED Street Lights, control Switches and wires to Main roads and around Chowdeshwari Ward No 02.

Budget Head ..... For Rs. **7500000.00**

Division No..... Estimate No. .....

Sl. No.	SR Page & SL No	Description of Work	Unit	Qty	Rate	Amount
		PWD Electrical SR 2019-20				
1	66/12/8/4	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source LED Streetlight 120 Watts	Nos	583	9200.00	5363600.00
2	14.2.3	Supplying and Fixing ....mm dia class A GI pipe bracket up to 2.7 meters long terminated with a reducing collar of 40x25mm to which extra pipe of 175mm length is fixed for fixing MV/SV/MH/FTL street light fitting of all capacities on rail/RCC/wall/tubular pole, using suitable clamps, bolts, nuts and wiring using suitable capacity wires.Using 40mm dia G.I.Pipe	Each	583	1212.00	706596.00
3	7/2.7.1	Wiring for lighting/power circuit using one of PVC insulated 1100V grade, stranded Aluminium wire single core in open or concealed system of wiring 4 sqmm	Mtrs	800	9.00	7200.00
4	43/6.17.7	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes.25 sqmm Long Barrel	Nos	30	20.00	600.00

5	79/14.5	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Each	583.00	175.00	102025.00
6	2/1 1 2	Supplying heavy gauge PVC conduit pipe .....dia mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.25mm dia 2mm thick	Mtrs	50	65.00	3250.00
		Total Rs				**6183271.00**
		BESCOM CSR 2018-19 (With out GST)				
7	3/7.01	ACSR conductor as per IS-398 (Part -2/1996) Supplaying of Weasel ACSR (6/2.59 mm Al + 1/2.59 mm St), Std Wt : 128 kgs/km	Mtrs	1000	21.55	**21552.00**
8	1/2.07	LT 2 Pin X Arms - MS (Dwg No. BESCOM/GM/QS&S/32 Dtd 24.11.2018	Nos	28	87.00	**2436.00**
9	2/5.01	RCC Pole clamp - MS (Dwg No BESCOM/GM/QS&S/30 Dtd 24.11.2018)	Nos	30	53.00	**1590.00**
10	2/6.03	1.1kV Ceramic Pin Insulator (Shell only)	Nos	25	18.00	**450.00**
11	2/6.04	1.1kV GI Pin FOR 1.1kV Cermaic shell Insulator	Nos	25	22.46	**561.50**
12	2/6.06	No.8 Strain Insulator	Per Mtr	20	16.00	**320.00**
13	4/6 02	Stringing of conductor (including pin binding, providing jumps, dead ending, etc.,)Weasel	Mtrs	1000	25.26	**25260.00**
14	3/4.01	Fixing of 2 Pin cross arm with insulator and Braces fixing	Nos	28	106.00	**2968.00**
15	BESCOM SR15/49 02	1.1KV Class HR (Heat Resistant) PVC Insulated & UnSheathed Aluminium Wires Multistrand Single core Lead wires as per IS-694: 2010PVC Wire - 25 Sqmm Al Wt: 6.7 Kgs, Total Wt: 11.5Kgs for 100Mtrs	Mtrs	140	32.31	4523.40

16	AR	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management 2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly 6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.	Nos	10	51500.00	515000.00
		Total Rs				**574660.90**
		GST Charges (12% on SR Electrical items) Item No 1 to 6.				741992 52
		Mislenious				75.58
		Grand Total Rs				**7500000.00**

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD(Elec) SR of 2019-20, BESCOM SR 2018-19 and Approved Rates

Asst. Engineer (Elec),

Asst. Exe Engineer (Elec)
Sub-Division No.
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
YALAHANKA DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

Administrative Sanction for Rs. 75.00.2akh
Seventy five lakhs only
is accorded under head P-0190 mayor
2019-20 grants
Registered as CE No. ..... Subject
to conditions contained in enclosed memo
No. EE/YNH/AE/31/2020-21 Dt. 28.8.2020

Executive Engineer

Technically sanctioned for Rs. 7500000/-
Rs in words SEVENTY FIVE LAKH ONLY
Under P0190
Job Code No 002-21-000009
Registered as SE(Y)/TS/ 18 /2021 subject
to conditions contained in enclosed memo
No 18 /20-21 Dated: 9/9/2020

TA

SE(Yelahanka)